

In the Claims

Amended Claim 1 with markings is as follows, and also appears in an *unmarked* claim listing in Appendix C.

1. (Amended) A ~~model for a~~ mutually exclusive folding domain molecular switch ~~including~~ comprising a fusion protein ~~comprising that includes~~ at least one ubiquitin insert protein having an insert domain comprising a regulatory domain of ubiquitin lying between an amino terminal and a carboxyl terminal of said at least one insert protein, said insert domain being associated with a first quantity of free energy; and, a barnase target protein having at least one surface loop that begins at an alpha carbon of a first surface loop amino acid and terminates at an alpha carbon of a second surface loop amino acid, said at least one surface loop comprising a cytotoxic target domain of barnase of said target protein, said target domain being associated with a second quantity of free energy, wherein, said at least one insert protein is ~~operatively~~ inserted at a point within said at least one surface loop between said alpha carbon of said first surface loop amino acid and said alpha carbon of said second surface loop amino acid, such that an amino-carboxyl length extending between an alpha carbon of said amino terminal of said at least one insert protein and an alpha carbon of said carboxyl terminal of said at least one insert protein is at least two-times greater than an alpha[-]carbon-alpha[-]carbon length extending between said alpha carbon of said first surface loop amino acid and said alpha carbon of said second surface loop amino acid.